

OUTLINE SHEET 2-2-1

Surface Ship Firefighting

A. Introduction

Firefighting is a major responsibility of each and everyone assigned to engineering. This lesson topic will help you understand your role as a fireman helping the ship survive fire and flooding.

B. Enabling Objectives

2.4 **DESCRIBE** the procedures for setting fire and flooding boundaries.

2.5 **DESCRIBE** the duties and responsibilities of the members of the repair party.

C. Topic Outline

1. Introduction
2. Overview
3. Purpose of Fire and Smoke Boundaries
4. Purpose of Flooding Boundaries
5. Duties and Responsibilities of Repair Party Members
6. Summary and Review
7. Assignment

ASSIGNMENT SHEET 2-2-2
Surface Ship Firefighting

A. Introduction

This material is to be completed prior to the material being covered in class.

B. Enabling Objectives

Refer to enabling objectives in Outline Sheet 2-2-1.

C. Study Assignment

1. Read Information Sheet 2-2-3

D. Study Questions

1. What is the purpose of a fire boundary?
2. What is the advantage of using the hose reel within the smoke control zone?
3. List all the members of the repair party required during a fire.

INFORMATION SHEET 2-1-3

Surface Ship Firefighting

A. Introduction

This information describes the procedure for setting fire and flooding boundaries. It also discusses the duties and responsibilities of the members of the repair party.

B. Reference

NWP 62-1-Rev D
 NSTM Chapter 555
 Fireman NAVEDTRA 12001
 Basic Military Requirements NAVEDTRA 12043

C. Information

- I. Fire and smoke boundaries are set immediately around the affected area to isolate and control the spread of smoke and hot gases to adjacent spaces.
 - A. Fire and smoke boundaries are set by:
 1. Closing off openings that are fume tight.
 2. Monitoring boundaries for heat or smoke
 3. Applying cooling water when required to protect unaffected areas.
 - B. A primary fire boundary is set using the bulkhead, deck, and overhead closest to and surrounding the fire.
 - C. A secondary fire boundary should be designated at the next bulkhead and deck above and below the primary fire boundary.
- II. Smoke Boundaries are set to contain smoke and also used to establish a controlled path for exhausting smoke to the weather decks.
 - A. Smoke curtains and smoke blankets are used to maintain smoke boundaries when doors and hatches are opened by firefighting personnel.
 - B. The smoke boundary nearest the fire is designated as the inner smoke boundary and normally coincides with the primary fire boundary.
 - C. The secondary smoke boundary, also known as the outer smoke boundary, is located farther away from the fire.
 1. The area between the inner and outer smoke boundary is called the smoke control zone or buffer zone.
 2. When access to the space on fire is opened by the attack team, smoke will be trapped in the smoke control zone.
 3. Only personnel wearing OBA should enter the smoke control zone.

4. Fire plugs and hose reels used by the fire party should be within the smoke control zone to minimize penetrations of the outer smoke boundary.
- III. Flooding boundaries are immediately set by the damage control repair party.
 - A. Flooding boundaries are established by bulkheads and decks which are free from flooding and likely to remain free from flooding.
 - B. After boundaries are set, the repair party advances toward the area of damage to reduce the possibility of further flooding.
- IV. Duties and responsibilities of the members of the repair party depend on the nature of the condition and the number of people available. As a minimum, the following functions shall be performed:
 - A. Required under all conditions
 1. Repair Party Leader
 - a) Coordinates all firefighting actions in their assigned area of the ship.
 - b) Receives reports from the scene leaders and reports to Damage Control Central.
 2. Scene Leader
 - a) In charge of firefighting at the scene of the fire.
 - b) Receives coordinating instructions from the repair party leader.
 3. Plotter - Plots all Damage Control Repair Station Actions on the ships DC plates.
 4. Sound Powered (S/P) Phone Talker - Communicates with and reports all communications between the Repair parties, Damage Control Repair Stations (DCRS) and DCC.
 5. Messenger - Carries messages when S/P phone communications are not possible.
 6. Investigator - Assesses the extent of damage. Investigators have a thorough knowledge of the Damage Control Repair Stations area of responsibility and are qualified in the use of the Naval Firefighter Thermal Imager (NFTI).
 - B. Required During a Fire
 1. Electrician - De-energizes circuits and rigs emergency power as required.
 2. Team Leader - Directs/Coordinates nozzle men.
 3. Nozzle man - Operates nozzle.
 4. Hose man - Tends the fire hose.
 5. Plug man - Operates fire plug and rigs jumper hoses.
 6. Smoke Control Team - Sets up desmoking equipment and directs smoke from the smoke control zone to the weather decks.
 7. Access man - Responsible for access to spaces, sometimes using forcible entry tools.
 8. Boundary man - Sets fire, smoke, and flooding boundaries.

9. Overhaulman - Examines and cleans up the area after the fire has been extinguished. Operations include finding and extinguishing hidden fires and determining whether the fire has extended to other parts of the ship.
 10. Post Fire Test Assistant (PFTA) - Conducts testing for oxygen, combustible gases, and toxic gases in that order. Authorized to certify the atmosphere as safe for breathing without respiratory protection. Any abnormal readings must be further examined and certified by a Gas Free Engineer.
 11. Reflash Watch - A watch posted with available fire fighting equipment to extinguish any fire that may re-ignite.
- C. Required during flooding
1. Dewatering Teams - Remove water from flooded spaces.
 2. Shoring Teams - Place supports against the side of, beneath, or above a structure to prevent metal fatigue, sagging, or bulging.
 3. Pipe Patching Teams - Make repairs on isolated lines to immediately place vital systems back in service.
 4. Hull Patching and Plugging Teams - Perform plugging and patching of holes below the water line to keep the ship afloat.
 5. Banding Teams - Band sheet metal to soft patches to add strength.
- D. Required for personnel casualty
1. Stretcher Bearers/First Aid - Removes and tends to injured personnel.